

Aviation Education News



Distributed Quarterly to Promote Aviation Education and Awareness in Virginia

August 2005

In this Issue

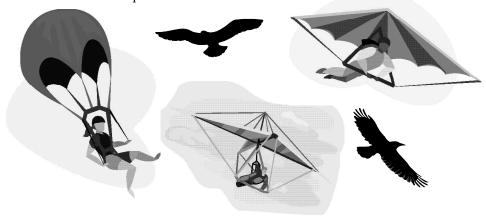
Air Sports and Nature in Harmony
Page 1
President's Notes Page 2
2006 International Aviation Art Contest
Information and Rules
Page 3
2006 Virginia Aviation Teachers Grant
Program Page 4
Virginia Airport Operators Council
Aviation Awards Scholarship
Page 5
J
Summer Transportation Institute
Page 5
ē
Upcoming Aviation Events
Page 5
9
Aviation Education Corner
Page 6
S
Aviation Ambassadors Program
Page 7
Virginia's Aviation Ambassador
Page 7
Calendar of Events Page 8

Air Sports and Nature in Harmony

2006 International Aviation Art Contest

The theme of the 2006 International Aviation Art Contest is "Air Sports and Nature in Harmony." Participating students will find ways that aviation and nature interact and capture this connection in a piece of artwork. The contest is open to students ages 6-17 and the deadline for submission of artwork is January 10, 2006. The Virginia Department of Aviation will once again sponsor (and accept entries for) the Virginia state level of the contest.

The International Aviation Art Contest is sponsored by the National Aeronautic Association, National Association of State Aviation Officials, National Aeronautics and Space Administration, and the Federal Aviation Administration in cooperation with the Federation Aeronautique Internationale.



See page 3 for complete contest information

What is an Air Sport?

Air Sports are activities where aircraft are used for fun -- flying aerobatics in airplanes, aeromodeling (model airplanes), hot air ballooning, gliding, helicopters (perhaps flying air tours), ultralight aircraft, parachuting, etc.

Part of the National Aeronautic Association's mission is to encourage the sport of aviation, which it does through its relationship with Air Sports Organizations in the United States.

NAA also represents the United States with the Federation Aeronautique Internationale (FAI), which is the world air sports federation, that oversees all air sport activity throughout the world, sets up world championship competitions and keeps world records in all disciplines.

PRESIDENT'S NOTES

The NASA Langley Research Center's Office of Communication & Education (OCE) is continuing to work in collaboration with the Virginia Department of Aviation, and the Virginia Department of Education to maintain two way communication between federal and state education efforts.

NASA's education outreach endeavors to partner with educational institutions so an invitation was extended to the Virginia Air and Space Center (VASC). These efforts have led to Dr. Richard Byles, Director of Education. The VASC also provides hands-on activities, camp in and teacher workshops, which are tied to the Virginia SOLs. It is the location of the Educator Resource Center (ERC) with a web site of:

http://www.vasc.org/erc/

NASA Langley is the primary site for distance learning. The following web sites are suggested:

http://ksnn.larc.nasa.gov (Grades K-5)
http://scifiles.larc.nasa.gov (Grades 3-5)
http://connect.larc.nasa.gov (Grades 6-8)
http://destination.larc.nasa.gov (Adult Learners)
http://live.larc.nasa.gov (Learning Through Interactive

Videoconferencing Experiences) http://education.nasa.gov NASA Education Programs

Peter D. Thomas (ViGYAN, Inc.) Aerospace Education Programs Manager Office of Education NASA Langley Research Center





VASEF AVIATION EDUCATION NEWS

is published quarterly in support of aviation education in the Commonweath of Virginia by the Virginia Department of Aviation.

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Please send story ideas, photographs, calendar events, and other items for possible inclusion to:

Betty Wilson
Virginia Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422
(804) 225-3783
(804) 236-3635 (FAX)
betty.wilson@doav.virginia.gov (E-mail)
http://www.doav.virginia.gov (Web site)



VASEFPURPOSE

The Forum is a non-profit organization to promote and foster aviation and space education among public and private schools, colleges and universities, and community and civic groups, and to promote increased public understanding of aviation and space and their economic, social, and career values in our society and in the Commonwealth of Virginia.

2006 International Aviation Art Contest

Contest Information

This Year's Deadline

Entries must be postmarked by January 10, 2006, and must be sent to the Virginia Department of Aviation.

Mail to: Virginia Department of Aviation, Attn: Art Contest, 5702 Gulfstream Road, Richmond, Virginia 23250-2422

This Year's Theme

This year's theme is "Air Sports and Nature in Harmony." Artwork will be judged, at least in part, for its creative use of this year's theme in relation to the aviation world.

Eligibility

All children in the age groups shown below are encouraged to participate in the Contest, even if they are related to officials or employees of the FAI or any of its member organizations.

Age Groups

Entries will be judged in three classes (determined by the age of the entrant on December 31, 2005).

I. Ages 6 to 9; II. Ages 10 to 13; III. Ages 14 to 17

State Awards

Entries in each age group will be judged and state winners and runners-up will be selected. Winners will receive a certificate and recognition from their state. The top three entries in each age group will be forwarded to Washington, D.C., to participate in the national competition.

National Awards

A national winner and two runners-up will be selected from each age group. All national winners will receive certificates, ribbons, a framed reproduction of their artwork, and a professional work of art compliments of the American Society of Aviation Artists.

International Awards

The national winners and runners-up in each age group will be forwarded to FAI headquarters for international judging. Winners of the international competition will receive certificates and gold, silver, or bronze medals.

Contest Rules

Artwork Dimensions

Artwork size should be 11 x 17 inches. Due to international criteria, 8.5 x 11 entries are NOT eligible. Artwork must NOT be framed, mounted, or outlined with borders.

Medium

All artwork must be hand made using any of the following media: Watercolor, acrylic or oil paints, indelible markers, colored pencils, felt-tip pens, soft ball-point pens, indelible ink, Crayola, or similar indelible mediums.

The following media are NOT permitted: Pencil, charcoal or other non-permanent medium, computer generated artwork, or collage work involving the use of photocopies.

Certification

A parent, guardian or art teacher must certify the authenticity of artwork and the age of each artist. (U.S. judges will issue certificates of authenticity to national winners for international competition).

Reproduction Rights

Once received, entries will become and remain the property of the Federation Aeronautique Internationale (FAI) or state sponsor and may be used for a variety of purposes.

Sponsors

The 2006 International Aviation Art Contest is sponsored by the National Aeronautic Association, National Association of State Aviation Officials, National Aeronautics and Space Administration, and the Federal Aviation Administration, in cooperation with the Federation Aeronautique Internationale (FAI), to motivate and encourage young people of FAI-member nations to become more familiar with and participate in aeronautics, engineering, and science.



The beauty of the earth is never clearer than when seen from the air. Every day, thousands of people flying in airliners look at the earth with a new perspective from above. Another group of boys, girls, men and women involved in air sports are fortunate to have a special view of the grandeur below them as the soar in gliders or float through the air in balloons. Others feel the rush of air as they parachute down to a beautiful field or cross the sky in an ultra light or helicopter.

From above, the fullness of nature is seen in ways unknowable from the ground. Helicopters give tours of the inaccessible rivers and canyons as balloons float across home towns, each giving new insight into how land, water, animals, and people share their environments. From the air, one is able to take pictures and film land that would otherwise never be seen. Aircraft do this without the need for roads. An airport or open field will do for the intrepid aviator.

While the air sport participants enjoy this freedom, they also must be very good neighbors to all the people and animals and the environment. This is especially important as they take-off and land. Air sports enthusiasts are happy to do this because the beauty of the earth is one of the reasons they love flying so much. So grab your favorite pen or brush and capture the connection between the land and the air. Create a work of art that shows air sports and nature in harmony.

2006 Virginia Aviation Teachers Grant Program

Have you ever considered enhancing your students' learning experience by integrating aviation into your teaching? Have you had a great idea for a lesson plan or other class activity with an aviation-related theme that you felt would benefit your students but couldn't implement because of lack of funding? The Virginia Department of Aviation's Teachers Grant Program may be able to assist you!

The program offers grants up to \$250.00 to Virginia public school teachers for their use in purchasing supplies and materials necessary to offer aviation-related experiences to their students.

Program Guidelines:

- 1. A maximum of one grant per individual teacher and/or school per school year is allowed.
- 2. The total amount requested for each grant must not be more than \$250.00. There is a cap on total grant funding for each school year. Grant applications will be ranked and funded until this cap has been reached.
- 3. Funds must be used before the end of the school year in which they are approved.
- 4. The program requirements listed below must be met in order to apply, and once selected, to be reimbursed.

Program Requirements:

- 1. Classroom teachers in grades K-12 are eligible to apply. Grants are available to teachers in any discipline provided that the lesson involves aviation.
- 2. Applications for the 2005/06 school year must be completed and postmarked no later than December 1, 2005. Applications will be evaluated and successful applicants will be notified in January.
- 3. Successful applicants must complete their program before the end of the year in which the grant is awarded.
- 4. Successful applicants must agree to submit a final report to the Virginia Department of Aviation at the completion of the program (no later than the end of the school year in which the grant is awarded). This report must include: a summary describing the results of the program, any lesson plans developed (at least one is required), how many students benefited from the program, a materials list with costs, and receipts for items purchased. This report must be received before reimbursement will be made.
- 5. Lesson plans and program summaries may be published in Department of Aviation publications (with credit given).

Applications will be mailed to schools in the fall. Return completed application form to:

Virginia Department of Aviation Attn: Betty P. Wilson 5702 Gulfstream Road Richmond, Virginia 23250-2422 Telephone: (804) 225-3783, ext. 107

FAX: (804) 236-3635

E-Mail: betty.wilson@doav.virginia.gov



National Air and Space Museum Calendar

Monday, September 26, 2005, 6:00 p.m.-

7:30 p.m. (National Mall)

The Wright Brothers' Aerodynamics -Past, Present, and Future - A Private After Hours Tour

Free, Tickets (Reservations) required.

Tuesday, October 4, 2005, 8:00 p.m.

(National Mall)

General Electric Aviation Lecture
"An Evening with Charles "Chuck"
Yeager"

Brigadier General Charles "Chuck" Yeager

Free, Tickets Required

Wednesday, October 12, 2005, 12:00 p.m.-

12:15 p.m. (National Mall)

Curator's Choice

Apollo Lunar Surface Experiments Dr. Bruce Campbell

Free.

Friday, October 14, 2005, 5:30 p.m.-7:00

p.m. (National Mall)

The Wright 1903 Flyer: An Intimate Look with the Curator

Peter Jakab

Free, Tickets (Reservations) required.

Saturday, October 15, 2005, 10:00 a.m.-3:00

<u>p.m.</u> (National Mall)

Family Day

The Wright Brothers & the Invention of the Aerial Age

Free.

Wednesday, October 19, 2005, 12:00 p.m.-

12:15 p.m. (National Mall)

Curator's Choice

Space Tourism: Dennis Tito's SK-2 Sokol

Spacesuit

Cathleen Lewis

Free

Thursday, October 20, 2005, 12:30 p.m.-

12:45 p.m. (Steven F. Udvar-Hazy Center)

Curator's Choice

The 1936 Goddard Rocket

Frank H. Winter

Free.

Wednesday, October 26, 2005, 12:00 p.m. -

12:15 p.m. (National Mall)

Curator's Choice

SpaceShipOne

Valerie Neal

Free.

For more information visit:

www.nasm.si.edu.

Virginia Airport Operators Council Awards Aviation Scholarship

The John R. Lillard scholarship is given to a student who is preparing for a career in aviation

Thomas James Gregory, a senior at Chatham High School, is the recipient of the 2005 John R. Lillard Aviation Scholarship. The \$3000 scholarship, sponsored by the Virginia Airport Operators Council (VAOC), is awarded to a Virginia high school senior who excels academically and has been accepted into a post secondary program that will prepare them for an aviation career. A talented student who is a member of the Piedmont Regional Governor's School for Mathematics, Science, and Technology, and a student pilot; Thomas has been accepted for enrollment in the Aviation Business Administration program at Embry-Riddle Aeronautical University in Daytona, Florida.

Presentation of the award was made at a ceremony held May 19th at Chatham High School. Mark Courtney, Airport Director of Lynchburg Regional Airport, represented the VAOC at the event.

The mission of the Virginia Airport Operators Council is to promote the interests of airports in the Commonwealth of Virginia through legislation, regulatory compliance, and education. Its members are airport managers, sponsors, and others involved in the operation of Virginia's public-use airports.

The scholarship is named in honor of the late John R. Lillard, a dedicated aviation professional and member of the Virginia Airport Operators Council, whose career included positions with Eastern Airlines, Chesterfield County Airport, and Richmond International Airport.



Students attending the 11th Annual Summer Transportation Institute (STIP) held at Virginia State University visited the Newport News/Williamsburg and Williamsburg-Jamestown Airports on June 22nd for briefings, tours, and a ride in a general aviation aircraft. The day provided a great introduction to commercial and general aviation for these middle school students who are interested in transportation careers.





The Virginia Aviation Museum

<u>Saturday, October 1, 2005, 9:30 a.m. - 5:00 p.m.</u>

SR-71 Forum 2005

Meet Blackbird pilots and crewmembers. Hear first-hand accounts of adventures in this fascinating aircraft. (Fee)

<u>Saturday, October 29, 2005, 7:00 p.m. -</u> 11:00 p.m.

Hangar Dance (Fee)

The Virginia Aviation Museum is located at the entrance to Richmond International Airport.

For additional information on museum hours and programs call (804) 236-3622.

Upcoming Aviation Events

Fall is always a busy time for aviation events in the Commonwealth of Virginia. Because of the beautiful weather, there are many fly-ins and airshows taking place across the state. An aviation enthusiast can often find a fun and educational event within a short drive from home. Some of these events include:

The Virginia Aviation Career Fair taking place at Manassas Regional Airport on September 24th offers aviation industry employers and jobseekers an opportunity to meet. This is the first fair of what is expected to become a twice yearly event that will rotate around the state.

The **Virginia Regional EAA Fly-In** taking place Oct. 1-2 at Dinwiddie Airport, is now in its ninth (9th) year. This year's event features exciting aerobatic performers, educational forums and workshops for adults as well as youth activities for the kids.

The **Culpeper Regional Airport Airfest 2005** will feature an airshow and Young Eagles rides for young people who want an opportunity to experience flight.

The **2005 Wings Over Chesterfield Airshow** Oct. 15-16 features world famous aerobatic performer Patty Wagstaff and the GEICO Skytypers.

High school students who are interested in aviation careers will be at Richmond International Airport on October 26th at the annual **Richmond Rotary Aviation Career Day**.

This fall visit your local airport and experience flight for yourself.

Aviation Education Corner

Dunked Napkin Experiment

Aeronautics: An Educator's Guide with Activities in Science, Mathematics, and Technology Education (NASA)

Objective:

This is an experiment to determine if air occupies space.

Standards and Skills:

Science

Science as Inquiry Physical Science Properties of Objects and Materials Evidence, Models, and Explanations

Mathematics

Verifying and Interpreting Results

Science Process Skills

Predicting Observing Investigating Interpreting Data

Background:

Gas, solid, and liquid are states of matter found on Earth. One of the basic characteristics of matter is that it occupies space. An observer can "see" a glass of milk sitting on a table. The milk and table are objects that occupy a measurable part of the total volume or space in the room.

Although air is present in the room with other matter, a visual aid is necessary for an observer to "see" that air occupies a portion of space as well. In this experiment, a plastic cup containing air and a crumpled napkin are turned upside down and placed into a container of water. Air and water cannot occupy the same space at the same time, therefore the napkin remains dry.

When conducting scientific inquiry, scientists begin by asking questions about why something is a certain way. In this case, "does air take up space?" Based on the question, they predict what the answer is. This is called forming a hypothesis.

The next step is to test the hypothesis with an experiment. Scientists draw conclusions from the results of their experiment, which leads them to either accept or reject their hypothesis.

Materials:

Clear plastic cup

Napkin

Water

Basin or small aquarium

Newpapers or drop cloth

Balloon

Warm-um

Have students discuss what they think air is. Which of the five senses lets them experience air? Can you taste or smell air? Probably not. Can they see it? No, but you can see things like a wind sock blow in the wind.

Can you feel air? Try holding your hand over a heating vent, fanning your face with a folded paper fan, or whirling around with a paper lunch bag on your arm. You might not be able to see air, but you can feel air molecules moving.

Does air take up space? To help students answer this question, take a deflated balloon and blow air into it so it is partly filled. Ask them what is in the balloon and then blow up the balloon until it is full. Is there more air in the balloon now than there was before? Obviously air takes up space.

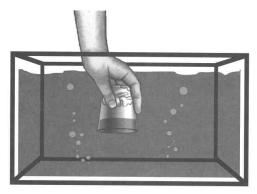
The balloon has air in it, but does the cup? In this exercise have students predict if there is air in the cup and what will happen to a napkin inside the cup if you put the cup in the basin of water.

Management:

This activity can be done as a teach demonstration or student activity. It will take about 15 minutes to complete and there is a potential for water spillage. Students can work individually or in pairs.

Activity:

- 1. Prepare a table for water spillage by covering it with newspapers or a drop cloth.
- 2. Fill an aquarium or other large container with water.
- 3. Crumple a napkin and stuff it into a plastic cup.
- 4. Turn the cup upside-down and plunge it completely into the water. Do not tilt the cup.
- 5. Remove the cup from the water, and extract the napkin.
- 6. Observe whether the napkins is wet or dry.



Students will have successfully met the objectives of this activity by:

Conducting the experiment.

Stating a conclusion based on the experiment.

Extentions:

- 1. Have the students alter variables like cup size, speed and angle of insertion and removal, and liquids other than water.
- 2. Discuss where air pockets can occur; in landfills, underwater or underground caves, capsized canoes, etc.
- 3. Brainstorm a list of examples of air taking up space that students might see in school, at home, or on television; balloons, bubbles, basketballs, etc.
- 4. Discuss ways to store air. Space travellers and scuba divers must store air in tanks.

Aviation Ambassadors Program Kicks-Off

New Program will encourage pilots and citizens of the Commonwealth to visit Virginia's Airports

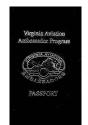
The Virginia Department of Aviation would like to introduce you to the new Virginia Aviation Ambassadors Program. The program is designed to encourage pilots to fly to all of the airports in Virginia and visit the aviation and transportation museums. We plan to increase awareness of Virginia's aviation system and contribute to the economic development activities of each locality by getting pilots to fly to airports and museums they may not normally visit.

This program is an extraordinary opportunity for pilots, aviation enthusiasts and the general public to see the valuable assets in our system of airports. It gives pilots and riders alike an opportunity to set and meet goals in their flying and sightseeing while having fun and experiencing what Virginia has to offer. Driving to our airports is also acceptable for our ground-bound friends, rainy days and where airport access may be difficult on the airplane or pilot skills.

The Virginia Aviation Ambassadors Program provides Bronze, Silver, and Gold level recognition for pilots and passengers who visit our airports and aviation museums, participate in one of our DOAV/FAA Safety programs and attend the Virginia Regional EAA Fly-In.

For more information visit the Virginia Department of Aviation's website: www.doav.virginia.gov.





The Ambassadors Passport (at left) is stamped at each location.

Virginia's Aviation Ambassador - Sara Parmenter



The poster for the new program depicts Virginia's Aviation Ambassador, **Sara Parmenter** and her Cessna 140 aircraft which is based at Farmville Regional Airport. Sara has been an active pilot for over 50 years and is currently flying to Virginia's airports to talk with people about the new program.

If you see Sara at an airshow or fly-in be sure to say hi!

SCIENCE MUSEUM OF VIRGINIA CALENDAR

EXHIBITIONS

New Permanent Exhibits:

Computer Bits and Pieces Light Vision: Eye Sight to Star Light Newton in Space: Bodies in Motion

Temporary Exhibits:

Dogs: Wolf, Myth, Hero, and Friend - Oct. 1-Jan. 2, 2006

IMAX FILMS

Wolves (opening Oct. 1) Solar Max (opening Oct. 1)

CARPENTER SCIENCE THEATRE COMPANY

Shakespeare and Galileo (Oct. 1-30)

LIVESKY: Informal "live" planetarium presentation of the month's celestial events. Third Friday of every month (except Oct.)

SKYWATCH: Third Friday of every month (weather permitting) on the front lawn.

24-Hour Information: (804) 367-0000 Box Office: (804) 367-1080 24-Hour Skywatch Information: (804) 367-8277 24-Hour TDD Information: (804) 367-9760 General Information - TDD: (804) 367-6552 Group Scheduling: (804) 367-6552 Home Page: http://www.smv.org

VIRGINIA AIR AND SPACE CENTER CALENDAR

EXHIBITS:

Adventures in Flight Gallery

TRAVELING EXHIBITS:

Science in Toyland (opens Sept. 17)

IMAX FILMS:

Magnificent Desolation: Walking on the Moon in 3D (opens Sept. 23)

SIGMA SERIES LECTURES

Cassini at Saturn: An Evolving Planetary System, by Robert E. Johnson (at Christopher Newport University Oct. 6, 2005, 7:30 p.m.

Biography of Neil Armstrong, by Jim Hansen Thursday, December 1, 2005, 7:30 p.m.

LIVE SCIENCE DEMONSTRATIONS

Star Station One: International Space Station Learn about the International Space Station.

Call (804) 727-0900 for showtimes

Visit the Center's Home Page: http://www.vasc.org

Calendar of Events

October 1-2, 2005

Virginia Regional EAA Fly-In at Dinwiddie County Airport.

October, 3, 2005

"The Last Five Miles" aviation safety program will be held at the Virginia Aviation Museum in Richmond

October 4, 2005

"The Last Five Miles" aviation safety program will be held at Compass Aero, at Norfolk International Airport.

October 5, 2005

"The Last Five Miles" aviation safety program will be held at Virginia Aviation at Lynchburg Regional Airport.

October 6, 2005

"The Last Five Miles" aviation safety program will be held at Virginia Highlands Airport in Abingdon.

October 8, 2005

Culpeper Regional Airport Airfest 2005 will be held at the Culpeper Regional Airport.

October 8, 2005

35th Anniversary of Williamsburg-Jamestown Airport

October 15-16, 2005

Wings Over Chesterfield Airshow at Chesterfield County Airport.

Visit www.doav.virginia.gov/calendar.htm for more events.

Aviation Education Supporters:

VASEF projects are funded by our membership fees and by donations from our member organizations. We would appreciate your support through membership in our organization.
Regular Membership \$25.00 annually (July - Dec. \$12.50)
Non-Profit Organization \$25.00 annually (July - Dec. \$12.50)
Corporate Membership \$100.00 annually (July - Dec. \$50.00)
New Member Renewal
Date:
Name:
Name of Organization:
Occupation:
Address:
City: Zip
Telephone
Please Return to: Tom Tyndall, VASEF Treasurer 5702 Gulfstream Road Richmond, Virginia 23250-2422



VASEF Aviation Education News

5702 Gulfstream Road Richmond, Virginia 23250-2422



Inside:

2006 Art Contest

2006 Teachers Grant Program Presorted Standard U.S. POSTAGE PAID Richmond, Va Permit No. 949